

that the frost plants show no especial differentiation of structure, so that it is probable that many plants, if they should pass through the death stage at a season offering the proper conditions of moisture and temperature would furnish "frost phenomena."—D. T. MACDOUGAL, *University of Minnesota*.

Proposed seed collection of the U. S. National Herbarium.—The Department of Agriculture at Washington, D. C., has inaugurated a seed collection in connection with the U. S. National Herbarium which is intended to include seeds of all the species of plants obtainable, especially weeds and forage plants.

The seeds, when not too large, will be placed in flat-bottomed specimen tubes of two sizes, the smaller 5^{cm} long by 1.5^{cm} in diameter, the larger in vials of twice these dimensions. These tubes will be neatly labeled, systematically arranged, and placed in covered trays made of binder's-board. Fleshy fruits of native American plants will be put into similar bottles filled with preserving fluid. Authentic herbarium specimens of plants raised from the seeds represented, or of plants from which the seeds were obtained, will accompany the collection whenever possible.

Seeds of North American weeds, grasses and other forage plants are especially desired and the co-operation of all botanists is earnestly requested. A suitable exchange of seeds for herbarium material or the publications of the Division may be had in return if desired. In the case of weeds and forage plants a liter of seed is wished in order that sets may be prepared for distribution to Agricultural colleges.

In addition to the work above outlined the Division of Botany is about to undertake the testing of various seeds as to their purity and germinative power, for which purpose a laboratory will be fitted up and equipped after the most approved methods of American and European seed-control stations. In this laboratory and in the open air different physiological experiments connected with seed germination and development will be conducted. Histological studies may ultimately be made to determine the structure of the seeds of American weeds and forage plants, and, if possible, to elicit facts of taxonomic value. The entire work will be carried on with special regard to its economic importance, while the collection will be particularly useful for reference.

The matter has been placed in charge of Mr. G. H. Hicks, recently instructor in botany at the Michigan Agricultural College, to whom correspondence may be addressed.—FREDERICK V. COVILLE, *Botanist, U. S. Department of Agriculture*.